EXHIBIT 91 -

Smith Presentation

(public document)

Updates in Gender Affirming Care

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https://tinyurl.com/FacultyGACSurvey

GOALS AND OBJECTIVES

- Understand current state of gender affirming care at FMC
- Improve clinical skills related to history taking and patient-centered language surrounding gender-affirming care (GAC)
- Improve knowledge and familiarity with hormone therapy initiation, adjustment, and maintenance
- Understand standards of care and appropriate documentation regarding gender-affirming care
- Identify resources for learning more about GAC

DISCLOSURES

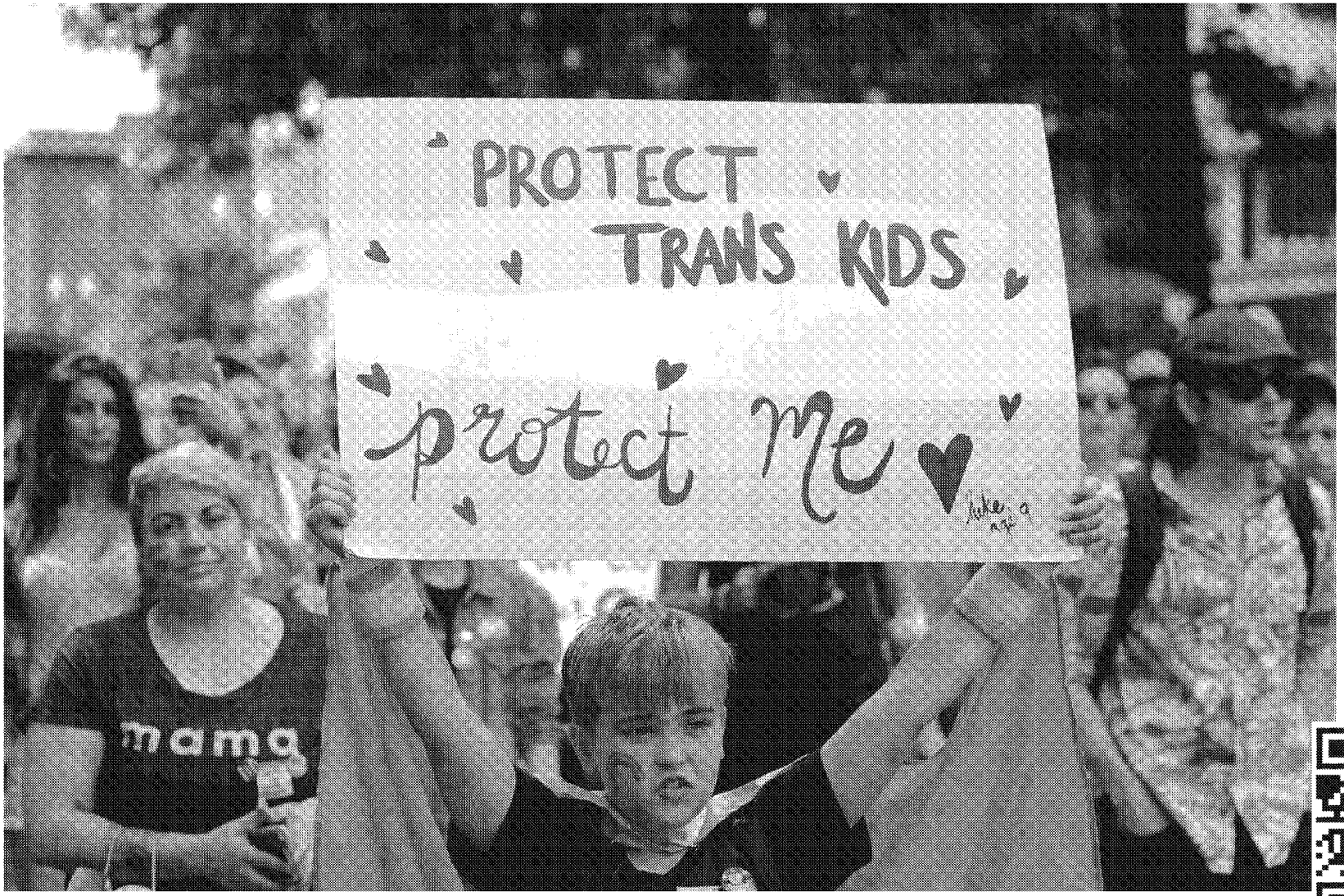
No financial disclosures ☹

We will be discussing non-FDA approved prescribing practices

Presentation is based off WPATH Standards of Care 8 as well as the UCSF Guidelines for the Primary and Gender Affirming Care of Transgender and Gender Non-Binary People

GROUND RULES

WHY WE DO THIS


PROTECT
TRANS KIDS
protect me
mama

RESIDENT GENDER-AFFIRMING CARE AT FMC

Review of Resident GAC Encounters from January 2023

- 32 unique Transgender and Non-binary patients were seen by residents during this time
- Assessed documentation of:
  - Patient name and pronouns
  - New patient "gender stories"
  - Criteria for gender dysphoria
  - Obtaining written or verbal consent prior to initiation of hormone therapy
  - Discussing contraception with patients at risk of pregnancy
  - Appropriate prescribing practices
  - Appropriate laboratory monitoring for baseline and follow up labs
  - Appropriate timeline for follow up
  - Health maintenance needs

RESIDENT GENDER-AFFIRMING CARE AT FMC

Room for improvement in resident clinical practice and documentation

- For patients initiating hormone therapy, only **3 out of 17** documented consent (written or verbal)
- For patients assigned female at birth, only **9 out of 20** documented a discussion about contraception or pregnancy risk
- Multiple examples of incorrect or unnecessary lab orders:
  - Ordering baseline estrogen and/or testosterone level prior to initiating hormone therapy
  - Ordering baseline SHBG or prolactin
- A few instances of unsafe hormone levels without a plan of care documented
  - **Estrogen level >800**, no follow up or medication dose adjustment noted
  - **Testosterone level >1300**, plan to "continue current dose"
  - Increasing testosterone from 40 to 100mg/week over a 6-month span without any labs (despite 2 in person visits)
- Other:
  - Unnecessary genital exam on a patient establishing care
  - Starting a 17-year-old on hormone therapy without documented consent or documented parental presence at appointment

INTRODUCTION:
WHAT IS GENDER-AFFIRMING CARE?

INTRODUCTION: WHAT IS GENDER-AFFIRMING CARE?

Gender-affirming care (GAC): a supportive, patient-centered form of healthcare, consisting of medical, surgical, mental health, and non-medical services for Transgender and Gender Diverse (TGD) people, often geared towards aligning their outward, physical traits with their gender identity.[1] May include:

Hormone Therapy	Surgery	Psychotherapy	Other Services
Masculinizing (testosterone) or feminizing (estrogen + anti-androgen)	Breasts/chest, external and/or internal genitalia, facial features, body contouring	Management of concomitant psych conditions, as well as gender dysphoria	Voice training Electrolysis Hair transplant Cancer screenings Preventive care Family planning

DSM CRITERIA FOR GENDER DYSPHORIA

A marked incongruence between one's experienced/expressed gender and natal gender of **at least 6 months** in duration, as manifested by at least two of the following:

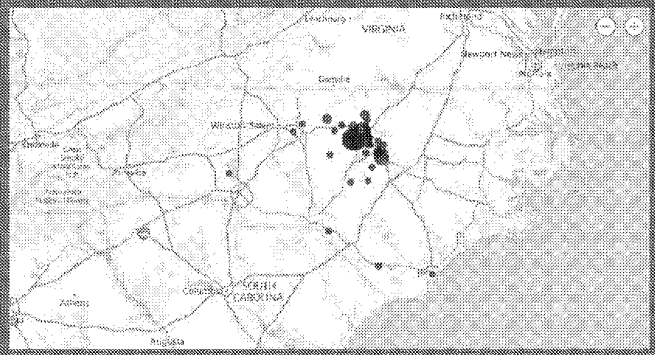
- A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics (or in young adolescents, the anticipated secondary sex characteristics)
- A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender (or in young adolescents, a desire to prevent the development of the anticipated secondary sex characteristics)
- A strong desire for the primary and/or secondary sex characteristics of the other gender
- A strong desire to be of the other gender (or some alternative gender different from one's designated gender)
- A strong desire to be treated as the other gender (or some alternative gender different from one's designated gender)
- A strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's designated gender)

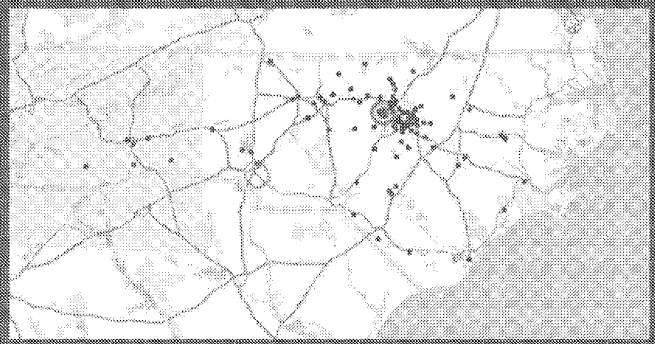
Plus, "clinically important distress" that affects the individual significantly socially, at work, and in other import areas of life.

This should be clearly documented prior to initiation of hormone therapy

GENDER-AFFIRMING CARE AT FMC

- Over 300 patients receiving GAC at the FMC
- Patients come from all over the state. The top geomap reflects FY 2020, and bottom reflects FY 2021
- Patients enter our care through multiple channels:
  - Community referrals
  - Referrals from UNC Transgender Health Program (via Dept of Urology)
  - Self-referrals from patients who have learned of our services by word of mouth, community presence, etc.
- Many residents at FMC are interested in and/or currently doing GAC: Residents did 32 GAC visits in January





PROVIDING GAC: AN OVERVIEW

Initial Assessment

- Learn your patient's story and treatment goals
- Build connection and trust
- Summarize the GAC process
- Baseline labs
- Introduce discussion guide/consent form

Prescribing

- Review and option to sign consent form
- Review baseline labs
- Answer patient's questions and address any concerns
- **Document verbal or written consent**
- Prescribe medications

FOLLOW-UP VISITS

- 1, 3, 6, and 12 months, then annually thereafter
- Monitoring labs
- Dose titration
- Assessing desired and undesired effects
- Referrals if indicated (surgery, mental health etc.)
- General primary care, including advocacy!


ESTABLISHING CARE FOR GAC

ASSESSING A PATIENT FOR HORMONE THERAPY

- Establish connection and trust; learn your patient's gender story, support system, goals, concerns
- Discuss major expected changes and risks using discussion guide/consent form
  - **.FMCGACFEM or .FMCGACMASC**
- Discuss medication options
  - Feminizing: estradiol (oral, IM, SQ or patch) +/- anti-androgen (usually spironolactone)
  - Masculinizing: testosterone (IM, SQ or topical gel)
- Baseline labs
  - Feminizing: BMP (if planning to start spironolactone)
  - Masculinizing: CBC or H&H; UPT if at risk of pregnancy
  - Baseline hormone levels not indicated unless concern for intersex condition or other complex case
- Typically defer physical exam at first visit

GOALS OF TREATMENT

- Important to talk early on about goals of treatment:
  - What are you hoping to achieve?
  - What features are you excited about reducing or developing?
  - What are your greatest sources of dysphoria / euphoria?
- Do not assume that everyone wants the highest possible dose of hormones, or even that they want hormones at all
  - Some patients, especially nonbinary folks, may prefer a very low dose of hormones ("microdose")
  - Some may want surgery only
- This discussion is also important for setting expectations (e.g. cannot raise pitch of voice via feminizing hormone therapy alone)

Smartphrase: .FMCGACNEWPATIENTMASC
.FMCGACNEWPATIENTFEM

@SUBJECTIVE@
@PREFERREDNAME@ is a @AGE@ @SEX@ coming to clinic today for the following issues:

@CC@
HPI:

- Preferred Name: ***
- Legal Name: ***
- Pronouns: ***

- Gender Identity Story (What do you want me to know? When did you identify as trans?): ***

- Patient meets at least two of the following criteria for Gender Dysphoria, with distress with an impact on important areas of their life: {Yes/No:11203}
  - Noticeable incongruence between gender that the patient sees themselves as and their sex characteristics:
  - An intense need to do away with (or prevent) primary/secondary sex features
  - An intense desire to have the primary and/or secondary sex features of the other gender
  - A deep desire to transform into another gender
  - A profound need for society to treat them as someone of the other gender
  - A powerful assurance of having the characteristic feelings and responses of the other gender

- Preference for Anatomical Terminology: ***

- Goals for Transition: ***

- Thoughts on Hormone Therapy: ***

- Thoughts on Surgery: ***

- Do they desire fertility preservation?: ***

- Legal documents changed?
  - Birth Certificate: {Yes/No:11203}
  - Driver's License/State ID: {Yes/No:11203}

EXPECTED PHYSICAL CHANGES WITH HORMONE THERAPY

TABLE 1A: EFFECTS AND EXPECTED TIME COURSE OF MASCULINIZING HORMONES [A]

Effect	Expected onset[B]	Expected maximum effect[B]
Skin oiliness/acne	1–6 months	1–2 years
Facial/body hair growth	3–6 months	3–5 years
Scalp hair loss	>12 months	Variable
Increased muscle mass/strength	6–12 months	2–5 years[C]
Body fat redistribution	3–6 months	2–5 years
Cessation of menses	2–6 months	n/a
Clitoral enlargement	3–6 months	1–2 years
Vaginal atrophy	3–6 months	1–2 years
Deepened voice	3–12 months	1–2 years

[A] Adapted with permission from Hembree et al. (2009). Copyright 2009, The Endocrine Society.
[B] Estimates represent published and unpublished clinical observations.
[C] Highly dependent on age and inheritance; may be minimal.
[D] Significantly dependent on amount of exercise.

TABLE 1B: EFFECTS AND EXPECTED TIME COURSE OF FEMINIZING HORMONES [A]

Effect	Expected onset[B]	Expected maximum effect[B]
Body fat redistribution	3–6 months	2–5 years
Decreased muscle mass/ strength	3–6 months	1–2 years
Softening of skin/decreased oiliness	3–6 months	Unknown
Decreased libido	1–3 months	1–2 years
Decreased spontaneous erections	1–3 months	3–6 months
Male sexual dysfunction	Variable	Variable
Breast growth	3–6 months	2–3 years
Decreased testicular volume	3–6 months	2–3 years
Decreased sperm production	Variable	Variable[C]
Thinning and slowed growth of body and facial hair	6–12 months	>3 years[D]
Male pattern baldness	No regrowth, loss stops 1–3 months	1–2 years

[A] Adapted with permission from Hembree et al. (2009). Copyright 2009, The Endocrine Society.
[B] Estimates represent published and unpublished clinical observations.
[C] Significantly dependent on amount of exercise.
[D] Complete renewal of male facial and body hair requires electrolysis, laser treatment, or both.

IMPORTANT CAVEAT:
All bodies are different; these are just meant to be **rough guidelines.**

Progressing through these changes at a slower rate does not mean "failure"; rather, this is an opportunity to engage in shared decision making re: dose escalation

Help residents practice counseling patients on these changes!

RISKS OF HORMONE THERAPY

Table 2. Risks associated with gender affirming hormone therapy (bolded items are clinically significant) (Updated from SOC-7)

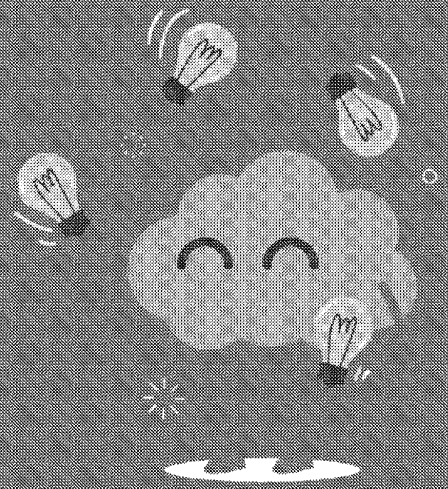
RISK LEVEL	Estrogen-based regimens	Testosterone-based regimens
Likely increased risk	**Venous Thromboembolism** **Infertility** Hyperkalemia[S] Hypertrigyceridemia Weight Gain	**Polycythemia** **infertility** Acne Androgenic Alopecia Hypertension Sleep Apnea Weight Gain Decreased HDL Cholesterol and increased LDL Cholesterol
Likely increased risk with presence of additional risk factors	Cardiovascular Disease Cerebrovascular Disease Meningioma[C] Polyuria/Dehydration[S] Cholelithiasis	Cardiovascular Disease Hypertriglyceridemia
Possible increased risk	Hypertension Erectile Dysfunction	
Possible increased risk with presence of additional risk factors	Type 2 Diabetes Low Bone Mass/ Osteoporosis Hyperprolactinemia	Type 2 Diabetes Cardiovascular Disease
No increased risk or inconclusive	Breast and Prostate Cancer	Low Bone Mass/ Osteoporosis Breast, Cervical, Ovarian, Uterine Cancer

[C]cyproterone-based regimen
[S]spironolactone-based regimen

- **Absolute contraindications** for testosterone therapy:
  - Pregnancy (must get UPT if sexually active)
  - Active sex-hormone sensitive cancer
- Other factors to consider: polycythemia, hyperlipidemia, HTN, T2DM, CVD
- **Absolute contraindications** for estrogen therapy:
  - Estrogen-sensitive neoplasm
  - End-stage chronic liver disease
- Other factors to consider: History of VTE, hypertriglyceridemia, T2DM, breast cancer, HTN
- Assess mental health and discussion emotional changes on hormone therapy
- Discuss fertility preservation options prior to starting hormones
- Discuss contraception if necessary if prescribing Testosterone
  - Any form of contraception is safe and effective!

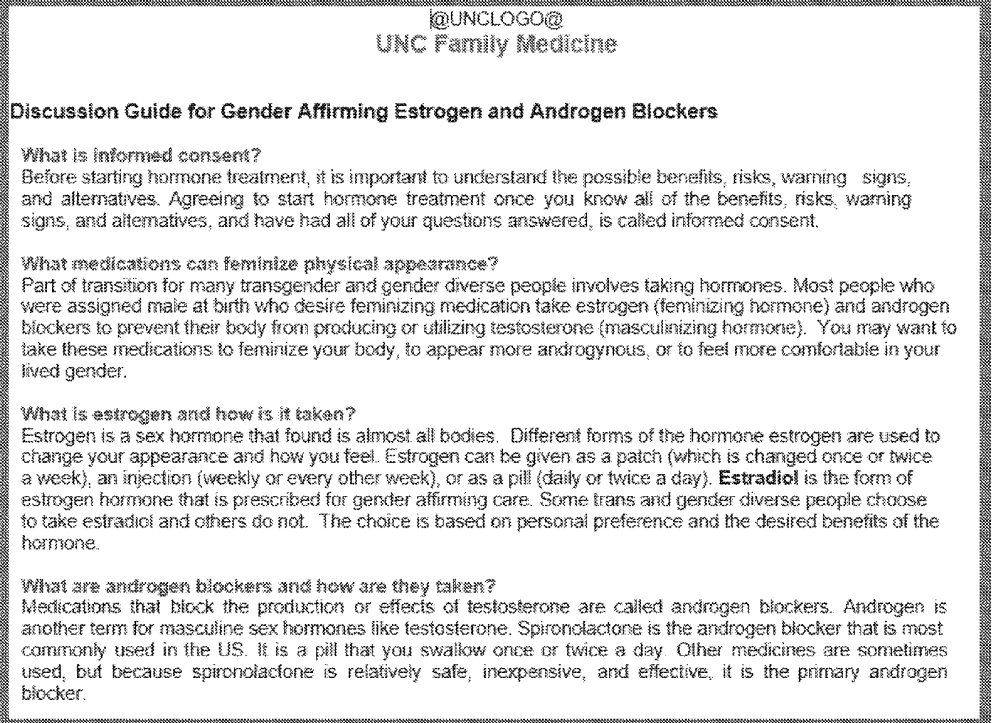
MENTAL HEALTH / PSYCHIATRIC CONSIDERATIONS

- TGNC individuals have higher rates of anxiety, depression, and other mental health conditions. **Having a mental health condition does not invalidate gender dysphoria and does not preclude treatment**
- Speaking to a therapist familiar with gender affirming care can be helpful but is **not required** for patients to start hormone therapy
- Depending on comfort level, you can manage uncomplicated depression and anxiety for your TGNC patients.
- If you have concern for bipolar, psychosis, complicated depression/anxiety, or other more complex mental health conditions, refer patients to the Dept of Psychiatry's **Gender Equity and Wellness Initiative (GEWI)**, limited to ages 5-30.
- **Transgender Health Program** is a great resource: message "Transgender Health Hillsborough Clinical Staff Pool"



DISCUSSION GUIDE/CONSENT FORM

- Discussion guide: **.FMCGACFEM or .FMCGACMASC**
  - Overview of hormone therapy process
  - Expectations
  - Risks and benefits of hormone therapy
- Print for patient and/or provide in AVS
- Document this discussion and either verbal or written consent prior to initiation of hormone therapy



@UNCLOGO@
UNC Family Medicine

Discussion Guide for Gender Affirming Estrogen and Androgen Blockers

What is informed consent?
Before starting hormone treatment, it is important to understand the possible benefits, risks, warning signs, and alternatives. Agreeing to start hormone treatment once you know all of the benefits, risks, warning signs, and alternatives, and have had all of your questions answered, is called informed consent.

What medications can feminize physical appearance?
Part of transition for many transgender and gender diverse people involves taking hormones. Most people who were assigned male at birth who desire feminizing medication take estrogen (feminizing hormone) and androgen blockers to prevent their body from producing or utilizing testosterone (masculinizing hormone). You may want to take these medications to feminize your body, to appear more androgynous, or to feel more comfortable in your lived gender.

What is estrogen and how is it taken?
Estrogen is a sex hormone that found is almost all bodies. Different forms of the hormone estrogen are used to change your appearance and how you feel. Estrogen can be given as a patch (which is changed once or twice a week), an injection (weekly or every other week), or as a pill (daily or twice a day). **Estradiol** is the form of estrogen hormone that is prescribed for gender affirming care. Some trans and gender diverse people choose to take estradiol and others do not. The choice is based on personal preference and the desired benefits of the hormone.

What are androgen blockers and how are they taken?
Medications that block the production or effects of testosterone are called androgen blockers. Androgen is another term for masculine sex hormones like testosterone. Spironolactone is the androgen blocker that is most commonly used in the US. It is a pill that you swallow once or twice a day. Other medicines are sometimes used, but because spironolactone is relatively safe, inexpensive, and effective, it is the primary androgen blocker.

UNC Family Medicine
New Patient Clinic Note

@ASSESSMENTPLANBEGIN@
@PREFERREDNAME@ is a @AGE@@SEX@ who presents to discuss initiation of gender-affirming care.

@PROBDIAG@

Attending: Dr. ***

 # Gender-affirming care
Preferred name @PREFERREDFIRSTNAME@, pronouns: ***. It is my assessment that @PREFERREDFIRSTNAME@ meets DSM criteria for gender dysphoria. Reviewed risks, complications and side effects associated with the use of hormone therapy including, but not limited to effects of feminizing hormones and changes in fertility, and provided written handout with further information. ***Patient has reviewed this and consents to proceed with feminizing hormone therapy. Informed that their insurance may require prior authorization. Labs drawn today for baseline levels and will review prior to hormone initiation.
- Baseline labs today:
    - BMP prior to Spironolactone
- ***Plan to send feminizing hormone therapy if baseline labs appropriate:
    - Estradiol ***
    - Spironolactone *** mg ***
- Resources provided in AVS

STARTING HORMONE THERAPY

SELECTING A MEDICATION REGIMEN

MASCULINIZING THERAPY

- **Testosterone cypionate** (100 or 200 mg/mL injection):
  - Low dose: 40 mg weekly
  - Typical starting dose: 50-100 mg weekly
  - Typical max dose: 100 mg weekly
  - Double dose if administered q2 weeks

- **Testosterone gel** (multiple formulations; preferred for patients with relative contraindications to T):
  - Low dose: 12.5-25 mg daily
  - Typical starting dose: 20-62.5 mg daily
  - Typical max dose: 100 mg daily.

- **Adjuvant medications:** finasteride, dutasteride (can help with hair loss and other side effects)

FEMINIZING THERAPY

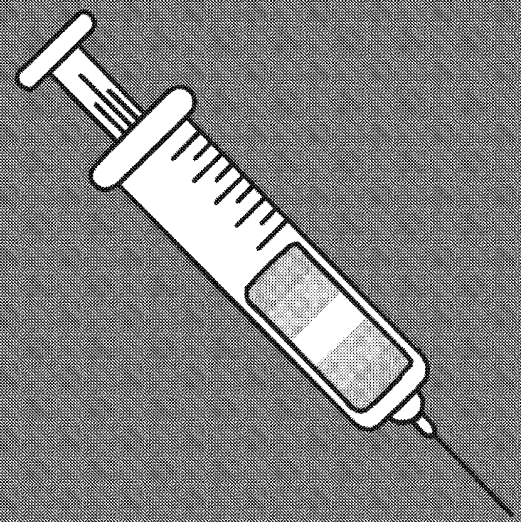
- **Estradiol valerate** (20 or 40 mg/mL injection):
  - Low dose: <5 mg weekly
  - Typical starting dose: 5-10 mg weekly
  - Max dose: 20 mg weekly

- **Estradiol cypionate** (5 mg/mL injection):
  - Same medication, different suspension
  - Generally ¼ the dose of valerate
  - Can be administered q2 weeks (double dose)

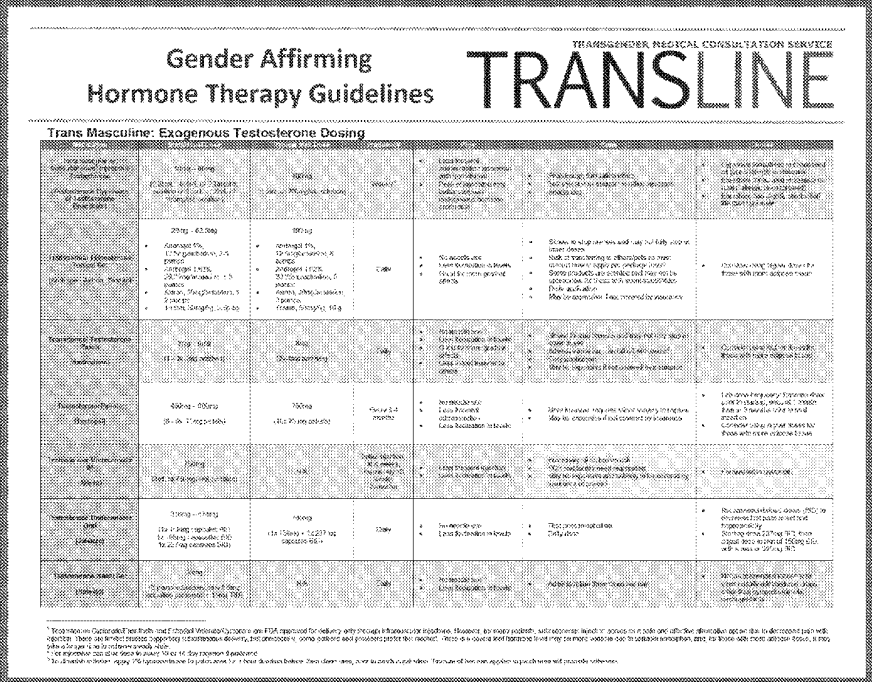
- **Spironolactone:** anti-androgen
  - Low dose: 25 mg total daily
  - Typical starting dose: 100 mg - 300 mg daily
  - Max dose: 400 mg daily
  - If not tolerated, can try **finasteride**

A QUICK NOTE ABOUT INJECTIONS

- All hormone injections can be intramuscular (IM) or subcutaneous (SQ).
- Pharmacy can provide injection teaching
- AVS / welcome letter has info about preparing for injections:
  - Fenway health self-injection guide
  - Instructional videos



SELECTING MEDICATIONS, CONT.



Gender Affirming
Hormone Therapy Guidelines

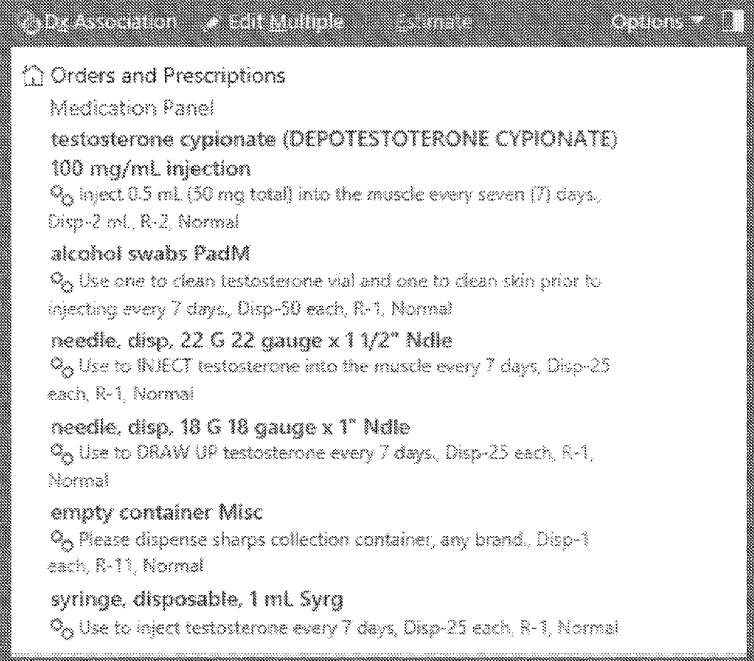
TRANSGENDER MEDICAL CONSULTATION SERVICE
TRANSLINE

Trans Masculine: Exogenous Testosterone Dosing

- Some patients may want to try medications that you're less familiar with, including:
  - Progesterone: reasonable to use, good information on UCSF site
  - Bicalutamide: would avoid
  - Lupron: logistically difficult due to insurance and affordability
- Transline, a transgender medical consultation service, has developed a set of easy-to-reference tables listing different options for gender-affirming medical treatment.
- Also includes dose conversions for different formulations!
- **If prescribing outside of typical dosing regimens, should document reasoning**

ORDERING MEDICATIONS

- Hormones will often require a prior auth, which may cause a delay of days to weeks before prescription is available.
- If injecting, patient will need supplies: needles, syringes, alcohol swabs, sharps container.
- Order sets: "**Gender Affirming IM Testosterone**" (SQ also available)
- **GoodRx** option if no insurance coverage
- May be cheaper/easier for patients to buy injection supplies online



FOLLOW UP VISIT(S)

FOLLOW-UP VISITS: OVERVIEW

- Timeline: 1m, 3m, 6m, 12m, annual
- Physical exam + preventive care: screenings, chronic conditions, etc. If you have it, screen it!
- Check-in re: physical changes and transition goals
- Mental health / wellbeing check-in: Seeing therapist and/or psychiatrist? Feeling safe and supported? Stable housing?
- Dose titration based on patient goals and follow-up labs

Smartphrase: **.UNCGACFOLLOWUPMASC** or **UNCGACFOLLOWUPFEM**

UNC Family Medicine
Established Patient Clinic Note

@ASSESSMENTPLANBEGIN@
@PREFERREDNAME@ is a @AGE@@SEX@ who presents for follow-up of gender-affirming care.

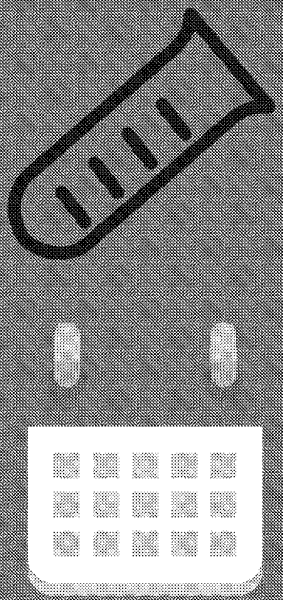
@PROBDIAG@
@depscreentoday@

Attending: Dr. ***

 # Gender-affirming care - masculinizing hormone therapy
Preferred name @PREFERREDFIRSTNAME@, pronouns: ***. Pt has been doing well on current dose, and is satisfied with changes. Physical changes since last visit include ***. Emotional/social changes include ***. Medical concerns include ***. Denies*** chest pain, shortness of breath, headache, vision changes, or any other new symptoms.
- Current testosterone regimen: ***
- Labs: H&H or CBC, total testosterone at 3, 6, and 12 months, then annually thereafter
    - Add CMP or lipids if clinical concern for liver disease or hyperlipidemia
    - Aim for testosterone in mid-physiologic range for cis male (300-700)
    - Goal hematocrit <55. If elevated, will ensure patient is well hydrated and recheck. If persistently elevated, will evaluate for pulmonary disease (OSA, tobacco use), would then consider lower dosing, more frequent dosing, and/or transdermal administration
- Follow-up in three months, repeat labs at that time
- Injection supplies: 18 gauge needle to draw, 1.5 mL syringe; 23 gauge for IM, 25 for SQ. **(***use GAC order set in Vinay's preference list)**
- PrEP eligibility: *** (if patient is eligible/interested in PrEP, add this as a separate problem below, and use dotphrase **FMCPREPSTART**)
- Contraception: ***

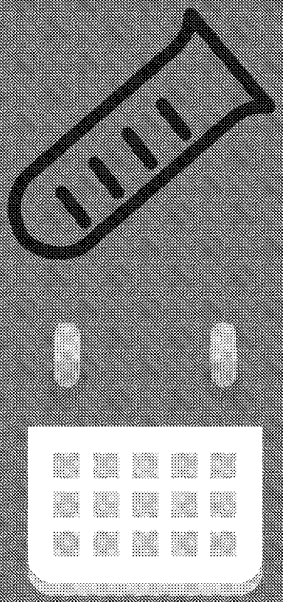
FOLLOW-UP VISITS: TESTOSTERONE-SPECIFIC LABS

- **Baseline:** H&H; UPT if sexually active
- **Follow-up:** H&H and total testosterone at 3, 6, and 12 months, then annually thereafter
  - Add CMP or lipids if clinical concern for liver disease or hyperlipidemia
- Generally, aim for testosterone in mid-physiologic range for a cisgender man (300-700)
- **HCT > 54 = Secondary polycythemia.** First repeat lab, then rule out pulmonary disease (inc. OSA), then consider more frequent, lower dosing, or transdermal administration vs. lowering dose.
- Note reference ranges that are sex specific (hormone levels, H&H, Creatinine)



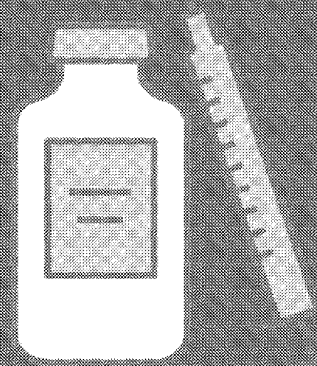
FOLLOW-UP VISITS: ESTROGEN-SPECIFIC LABS

- **Baseline:** BMP if considering spironolactone; CMP if risk factor for liver dx.
- **Follow-up:** Total estrogen + total testosterone at 3, 6, and 12 months, then annually thereafter; add BMP if on spironolactone.
  - **Estrogen reference range:** cis female follicular / pre-ovulatory range (100-300ish)
    - Note may be widely variable if on injectable estrogen → recheck
  - **Testosterone reference range:** goal <55 ng/dL
- Less commonly ordered: can reference UCSF guidelines for more information about these
  - Prolactin
  - SHBG + albumin



FOLLOW-UP VISITS: DOSE TITRATION

- Titrate based on combination of patient goals and lab values; **they are driving, we are the guardrails.**
- If a patient wants more dramatic and quicker results, and labs aren't concerning, generally ok to increase dose.
  - Always consider predisposing risk factors for complications
  - Shared decision-making re: how much to increase by
  - If on estrogen + spiro, can increase both simultaneously
- If lab values exceed suggested range, don't necessarily need to decrease dose right away; consider smaller, more frequent doses, or alternate route (e.g. transdermal). Also review injection technique!
- Re-check labs 2-3 months after dose change.



PREVENTIVE CARE: IF YOU HAVE IT, SCREEN IT

Patients assigned male at birth:

- Consider mammogram at age >50 and >5-10 years on estrogen
- Consider annual speculum exam post-vaginoplasty

Patients assigned female at birth:

- Generally do not need mammograms after mastectomy, can consider annual chest exams
- Considerations around pap smears
  - Self swab?
  - Stop after hysterectomy if cervix removed

A note on language:

Talking to patients about anatomy may be triggering or dysphoria-inducing

Using more passive or de-personalized phrasing can help, as well as including gender affirming language

*"**Anyone with a cervix** should have a pap smear every 3-5 years"* or *"**Guys** who have a cervix should still be screened for cervical cancer"* *instead of* *"You still have your cervix, so you need pap smears regularly"*

RECOMMENDED COMPONENTS OF DOCUMENTATION

General Information	Chosen name *Document in Epic or note; consistent in note*
	Pronouns *Document in Epic or note; consistent in note*
	"Gender story" *first visit only*
Diagnosis	Note clearly states patient meets criteria for Gender Dysphoria *first visit only*
Consent	Consent documented *verbal or written*
Labs	For Testosterone: • Baseline CBC • Testosterone and CBC q3 months for first year, after dose changes • Annual CBC • HCT <55 *or plan documented* • Testosterone 200-1000 *or plan documented*
	For Estradiol/spiro: • Baseline BMP prior to spiro • Test, Estradiol, BMP q3 months for first year, after dose changes • Annual BMP while on spiro • K < 5.0 *or plan documented* • Estrogen 50-400 *or plan documented*

Pregnancy	Documentation of pregnancy risk/contraception status (AFAB)
Prescriptions	Estrogen not above max: 8mg PO daily, 400mcg transdermal, 20mg IM weekly (EV) 2.5mg IM weekly (EC) *or documented w/ appropriate labs* Spironolactone not above max 200mg BID Stop Spiro post-orchiectomy Testosterone not above max: 100mg/wk
Health Maintenance	Pap (AFAB) *Or documented* Mammography (AFAB) *or documented* Mammography (AMAB) *or documented*
Follow up	Every 3 months for first year *(appt scheduled, documented in note, or in AVS)*

CLINICAL CASES

CASE 1: MATTHEW

Matthew is a 23-year-old Transgender man who presents to establish care for gender affirming care. He began experiencing distress about his body at age 11 and has identified as Transgender since age 15. He reports significant distress about his voice, chest, and periods.

Matthew's past medical history includes Major Depressive Disorder for which he is prescribed Zoloft, and a history of a suicide attempt at age 16. He reports his mood is currently "okay" – he intermittently experiences passive SI but denies active plan or intent. His PHQ9 score today is 10.

He is otherwise healthy and takes no other medications. He is sexually active with men. He drinks 3 beers per week, does not use tobacco, and smokes marijuana once a month.

Matthew has never taken hormones before and is excited to start Testosterone. He is also interested in double mastectomy ("top surgery").

CASE 1: MATTHEW

Is there anything else you would like to know about Matthew?

What labs should we get today?

Are there any medications we should talk to him about in addition to Testosterone?

Matthew's baseline hemoglobin is 14 and his urine pregnancy test is negative. Do we have any concerns about starting Testosterone?

What dose should we prescribe, and when should he follow up?

CASE 2: ALEX

Alex is a 62-year-old Transgender woman who is transferring care from an outside clinic. She has been on feminizing hormone therapy for 10 years. She was previously taking oral estradiol 6mg daily and spironolactone 100mg BID. In 2021, she had a DVT which was thought to be provoked due to estrogen. She was treated with Xarelto, and her previous prescriber stopped prescribing her estrogen. However, she would like to continue hormone therapy and has been purchasing oral estrogen of the internet.

Her only other PMH is well controlled HTN on Lisinopril. She does not smoke. She has been married to her wife for 20 years. She has not undergone any surgeries but is interested in vaginoplasty.

Alex is establishing care with an intern and would like to restart prescribed hormone therapy today.

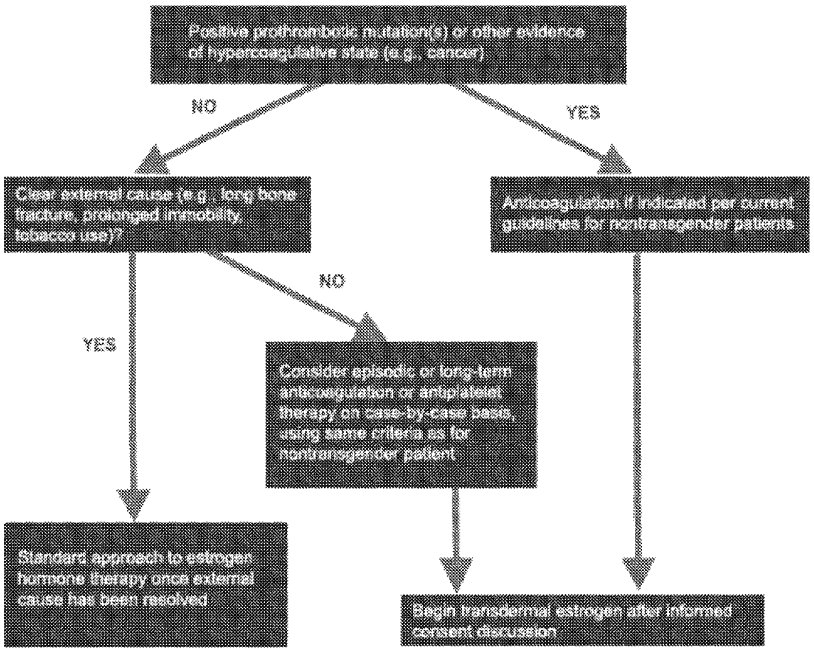
What concerns do you have about prescribing hormones to Alex? How would you approach this conversation with her and with your intern?

CASE 2: ALEX

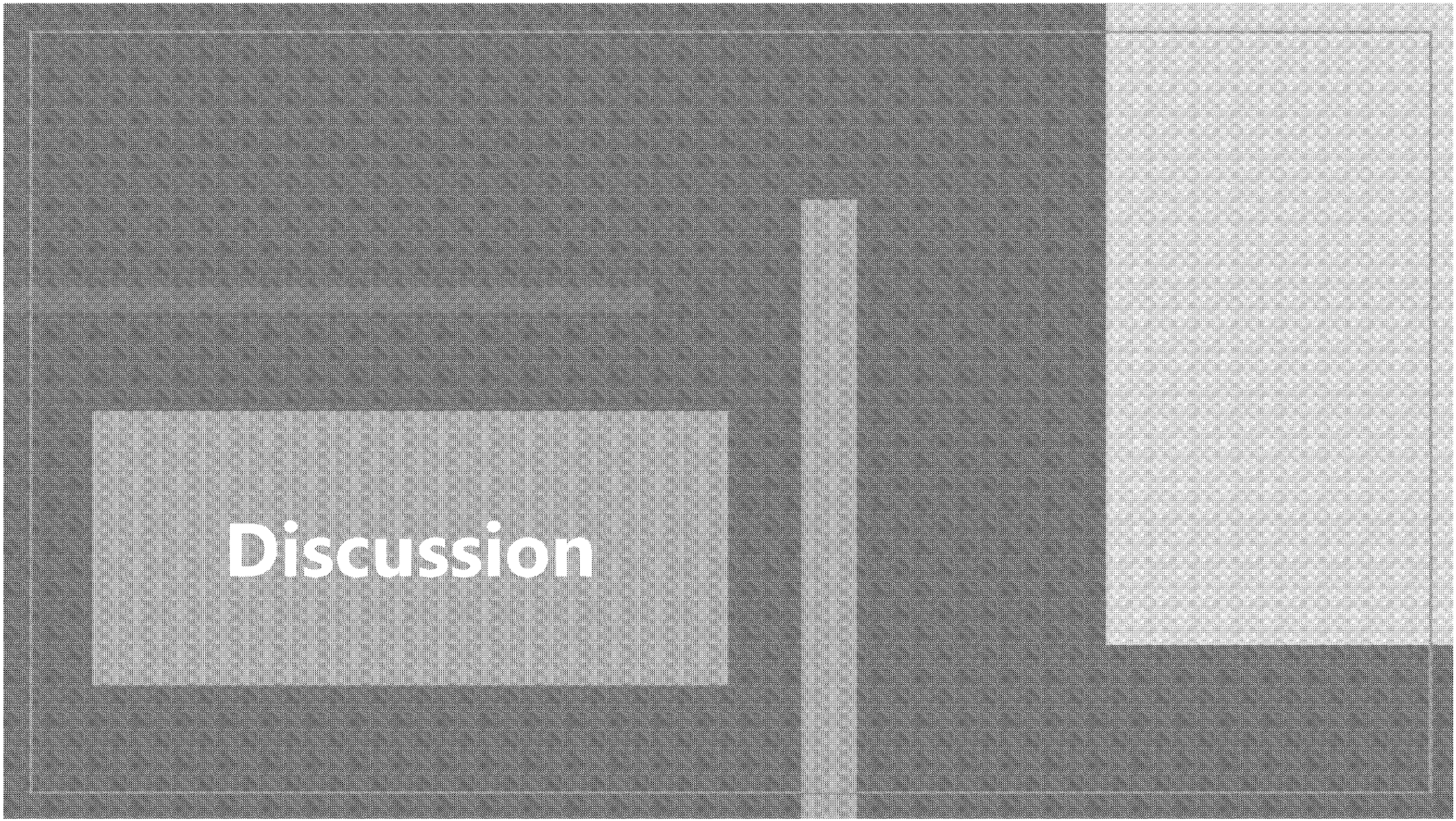
Ideas for approaching this conversation:

- Harm reduction
- Less risky forms of estradiol?
- Continue Xarelto indefinitely?
- Medication adjustment after vaginoplasty
- What age should we stop estradiol?

Figure 1. Approach to management of estrogen in patients with a personal history of VTE



This figure outlines the estrogen management approaches for patients with a personal history of VTE.


Discussion

RESOURCES: SEE BINDER IN RESIDENT WORKROOM

- WPATH Standards of Care, Version 8: https://www.wpath.org/publications/soc
- UCSF Guidelines: https://transcare.ucsf.edu/guidelines
- TRANSLINE guidelines: https://transline.zendesk.com/hc/en-us/articles/229373288-TransLine-Hormone-Therapy-Prescriber-Guidelines
- Fenway Health self-injection guide: https://fenwayhealth.org/wp-content/uploads/2015/07/COM-1880-trans-health_injection-guide_small_v2.pdf
- Safe Zone Training, via UNC LGBTQ Center: https://lgbtq.unc.edu/programs/programs-education/safe-zone/

RESOURCES: "ADVANCED" TOPICS DISCUSSIONS

Save the Date!

Tuesday, April 18, 6:00-8:00pm

Discussing gender affirming care for medically complex adults

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10. OASH office of population affairs: https://opa.hhs.gov/sites/default/files/2022-03/gender-affirming-care-young-people-march-2022.pdf
11. WPATH Standards of Care, Version 7: https://www.wpath.org/publications/soc
12. UCSF Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People (2016): https://transcare.ucsf.edu/guidelines
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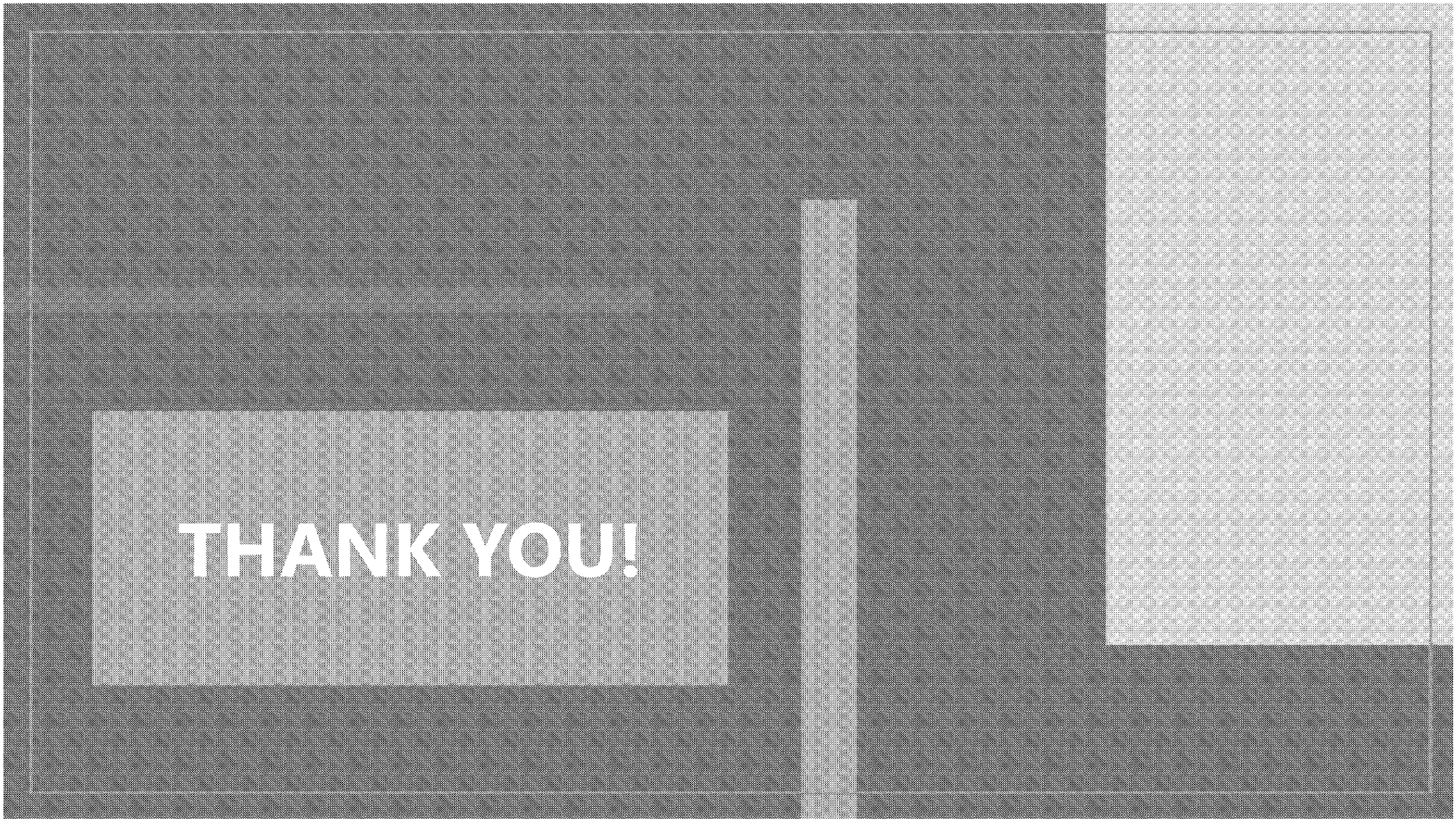
THANK YOU!